**Listing of Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

1-53. (canceled)

54. (new) A method of providing localization cues to a source audio signal to perceive a sound source at a selected direction and a selected near field distance from a listener's head based on a head related transfer function (HRTF) pair determined for the sound source located at the selected direction and a reference distance at a larger distance from the listener's head, the method comprising:

providing a two channel audio signal from the source audio signal;

spectrally shaping the two channel audio signal based on the HRTF pair;

introducing a time delay between the channels of the two channel audio signal based on an interaural time delay associated with the selected direction; and

applying a different gain factor to each of the two channels,

wherein the different gain factors are determined based on the selected direction and the selected near field distance from the listener's head.

55. (new) The method as claimed in claim 54 wherein the different gain factors are determined for each ear based on the inverse square of the respective sound source to ear distances for the sound source positioned at the selected near field distance from the listener's head.

56. (new) The method as claimed in claim 54 wherein the different gain factors are determined by providing a lookup table of gain values indexed by the interaural time delay associated with the selected direction and selecting the respective gain values from the lookup table.

57. (new) The method as recited in claim 54 wherein the different gain factors are determined by selecting the interaural time delay associated with the selected direction as representing the difference in path lengths between the sound source and the respective ears, determining a horizontal plane azimuth from the interaural time delay, and determining the respective sound source to ear distances for the sound source positioned at the near field distance.

58. (new) The method as recited in claim 54 wherein the reference distance is about 1.0 m.

59. (new) The method as recited in claim 54 wherein the near field distance is greater than or equal to 0.2 m and less than or equal to about 1.5 m.

60. (new) The method as recited in claim 54 wherein applying a different gain factor occurs before the spectral shaping of the left and right channel signals.

61. (new) The method as recited in claim 54 wherein applying a different gain factor occurs after the spectral shaping of the left and right channel signals.

62. (new) The method as recited in claim 54 further comprising modifying the frequency response of one of the two channels to reflect head shadowing effects at the near field distance.

63. (new) The method as recited in claim 54 wherein the HRTF pair is selected from a plurality of HRTF pairs respectively corresponding to a plurality of directions at the reference distance.

64. (new) The method as recited in claim 54 wherein the source audio signal having been provided with localization cues is combined with a further two or more channel audio signal.

65. (new) The method as recited in claim 54 wherein introducing a time delay between the channels of the two channel audio signal occurs before applying a different gain factor to each of the two channels.

66. (new) A computer readable storage medium having stored thereon a computer program for implementing a method of providing localization cues to a source audio signal to perceive a sound source at a selected direction and a selected near field distance from a listener's head based on a head related transfer function (HRTF) pair determined for the sound source located at the selected direction and a reference distance at a larger distance from the listener's head, said computer program comprising a set of instructions for:

providing a two channel audio signal from the source audio signal;

spectrally shaping the two channel audio signal based on the HRTF pair;

introducing a time delay between the channels of the two channel audio signal based on an interaural time delay associated with the selected direction; and

applying a different gain factor to each of the two channels,

wherein the different gain factors are determined based on the selected direction and the selected near field distance from the listener's head.

67. (new) The computer readable medium as recited in claim 66 wherein the different gain factors are determined for each ear based on the inverse square of the respective sound source to ear distances for the sound source positioned at the selected near field distance from the listener's head.

68. (new) The computer readable medium as recited in claim 66 wherein the different gain factors are determined by providing a lookup table of gain values indexed by the interaural time delay associated with the selected direction and selecting the respective gain values from the lookup table.

69. (new) The computer readable medium as recited in claim 66 wherein the reference distance is about 1.0 m.

70. (new) The computer readable medium as recited in claim 66 wherein the near field distance is greater than or equal to 0.2 m and less than or equal to about 1.5 m.

71. (new) The computer readable medium as recited in claim 66 wherein applying a different gain factor occurs before the spectral shaping of the left and right channel signals.

72. (new) The computer readable medium as recited in claim 66 wherein applying a different gain factor occurs after the spectral shaping of the left and right channel signals.

73. (new) The computer readable medium as recited in claim 66 wherein the instructions further comprise modifying the frequency response of one of the two channels to reflect head shadowing effects at the near field distance.

74. (new) The computer readable medium as recited in claim 66 wherein the HRTF pair is selected from a plurality of HRTF pairs respectively corresponding to a plurality of directions at the reference distance.

75. (new) An apparatus for processing a source audio signal to perceive a sound source at a selected direction and a selected near field distance from a listener's head , comprising:

a memory for storing a plurality of HRTF pairs corresponding to a plurality of different directions from a sound source to the listener at a reference distance from the listener's head, said reference distance being larger than the near field distance; and

a processor configured to perform the following method:

providing a two channel audio signal from the source audio signal;

selecting one of the plurality of HRTF pairs to correspond to the selected direction;

spectrally shaping the two channel audio signal based on the selected HRTF pair;

introducing a time delay between the channels of the two channel audio signal based on an interaural time delay associated with the selected direction; and

applying a different gain factor to each of the two channels,

wherein the different gain factors are determined based on the selected direction and the selected near field distance from the listener's head.

76. (new) The apparatus as recited in claim 75 wherein the different gain factors are determined for each ear based on the inverse square of the respective sound source to ear distances for the sound source positioned at the selected near field distance from the listener's head.

77. (new) The apparatus as recited in claim 75 wherein the different gain factors are determined by providing a lookup table of gain values indexed by the interaural time delay associated with the selected direction and selecting the respective gain values from the lookup table.

78. (new) The apparatus as recited in claim 75 wherein the different gain factors are determined by selecting the interaural time delay associated with the selected direction as representing the difference in path lengths between the sound source and the respective ears, determining a horizontal plane azimuth from the interaural time delay, and determining the respective sound source to ear distances for the sound source positioned at the near field distance.

79. (new) The apparatus as recited in claim 75 wherein the reference distance is about 1.0 m and the near field distance is greater than or equal to 0.2 m and less than or equal to about 1.0m.

80. (new) The apparatus as recited in claim 75 wherein applying a different gain factor occurs before the spectral shaping of the left and right channel signals.

81. (new) The apparatus as recited in claim 75 wherein applying a different gain factor occurs after the spectral shaping of the left and right channel signals.

82. (new) The apparatus as recited in claim 75 as recited in claim 54 wherein introducing a time delay between the channels of the two channel audio signal occurs before applying a different gain factor to each of the two channels.

83. (new) A two channel audio signal, comprising:

a right signal for a right ear of a listener and a left signal for a left ear of said listener, said right signal and said left signal obtained by:

spectrally shaping a two channel input signal derived from a source audio signal, the spectral shaping based on at least a selected one of a plurality of head related transfer functions (HRTF's) determined for a sound source at a reference distance and a selected direction from the listener's head;

applying a different gain adjustment to each of the channels of the two channel signal, the gain adjustment comprising selecting respective values for magnitude of said left signal and magnitude of said right signal to provide cues for perception of a near field distance from said sound source to the listener's head, each of the respective magnitudes based on the distance from the sound source to the respective one of the left and right ears of the listener; and

introducing a time delay between each of the channels of the two channel audio signal based on an interaural time delay associated with the selected direction.

84. (new) The two channel audio signal recited in claim 83 wherein the different gain factors are determined by providing a lookup table of gain values indexed by the interaural time delay associated with the selected direction and selecting the respective gain values from the lookup table.

85. (new) The two channel audio signal recited in claim 83 wherein the different gain factors are determined by selecting the interaural time delay associated with the selected direction as representing the difference in path lengths between the sound source and the respective ears, determining a horizontal plane azimuth from the interaural time

delay, and determining the respective sound source to ear distances for the sound source positioned at the near field distance.

86. (new) A method of providing localization cues to a source audio signal to perceive a sound source at a selected direction and a selected near field distance from a listener's head based on a head related transfer function (HRTF) pair selected from a library containing a plurality of HRTF pairs determined for the sound source located at a larger 1.0 m reference distance from the listener's head, the method comprising:

converting the source audio signal into a two channel audio signal, each of the channels having the identical source audio signal content;

introducing a time delay between the channels of the two channel audio signal based on an interaural time delay associated with the selected direction;

spectrally shaping the two channel audio signal based on the selected HRTF pair; and

applying a different gain factor to each of the two channels,

wherein the different gain factors are determined based on the selected direction and the selected near field distance from the listener's head, the different gain factors being applied to result in the intensity ratios between the respective channels being proportional to the inverse squares of the distances between the corresponding ears and the sound source when located at a near filed distance form the listener's head.

87. (new) The method as recited in claim 86 wherein the different gain factors are determined by one of calculation or derived form a lookup table indexed by the interaural time delay value.